

Claims

[c1] WHAT IS CLAIMED IS:

1. A connecting device for a first rod and a second rod to be connected to one another, the connecting device comprising:

a first profile provided on the first rod and a second profile provided at the second rod, wherein the first and second profiles are configured to be joined in a connecting position along a partition line by being moved relative to one another in a direction of a predetermined degree of freedom, predetermined by the first profile and the second profile, wherein the first and second profiles are moved immediately before reaching the connecting position in the direction of the predetermined degree of freedom;

wherein the first profile and the second profile in the joined state define a cutout bridging the partition line and extending on both sides of the partition line;

a separate locking bar having a cross-sectional shape matching a cross-section of the cutout;

wherein the first and second rods and the locking bar form a unit of three components, wherein the locking bar is inserted into the cutout and provides a movability

lock between the three components of the unit in a locking direction opposite to the direction of the predetermined degree of freedom immediately before reaching the connecting position.

- [c2] 2. The connecting device according to claim 1, wherein the first and second profiles each have at least one undercut and wherein the first and second profiles engage one another in the connecting position by mutually engaging the at least one undercut.
- [c3] 3. The connecting device according to claim 1, wherein the first and second profiles each have at least one undercut and wherein the locking bar engages the at least one undercut of the first and second profiles.
- [c4] 4. The connecting device according to claim 1, wherein the first and second profiles each have at least one first undercut and at least one second undercut, wherein the first and second profiles engage one another by mutually engaging the at least one first undercut, and wherein the locking bar engages the at least one second undercut, respectively.
- [c5] 5. The connecting device according to claim 1, wherein a longitudinal axis of the locking bar extends perpendicularly to the direction of the predetermined degree of

freedom.

- [c6] 6. The connecting device according to claim 1, wherein a longitudinal axis of the locking bar extends at a slant to the direction of the predetermined degree of freedom.
- [c7] 7. The connecting device according to claim 1, wherein the first and second rods are joined at an acute angle, an obtuse angle or a right angle relative to one another.
- [c8] 8. The connecting device according to claim 7, wherein at least four of the first and second rods are joined to form a frame.
- [c9] 9. The connecting device according to claim 1, wherein the locking bar is removable from the cutout.
- [c10] 10. The connecting device according to claim 1, wherein the locking bar is non-releasable once inserted into the cutout.
- [c11] 11. The connecting device according to claim 1, wherein the locking bar has a cross-section selected from the group consisting of a rectangular shape, a circular shape, a diamond shape, a figure eight shape, a dovetail shape, an elliptical shape, and a cross shape.
- [c12] 12. The connecting device according to claim 1, wherein the first and second rods are hollow and comprise rein-

reinforcements arranged near the connecting location.

[c13] 13. The connecting device according to claim 12, wherein the reinforcements are hollow rods or solid rods matched to a hollow interior of the first and second rods, wherein the reinforcements fully contact an inner surfaces of the first and second rods or contact the inner surface at least along two lines in a longitudinal direction of the hollow interior, wherein the reinforcements are arranged across an entire length of the first and second rods or across a portion of the entire length of the first and second rods.

[c14] 14. The connecting device according to claim 1, wherein the first and second profiles in the joined state have rotation symmetry.

[c15] 15. The connecting device according to claim 1, wherein first and second rods and the locking bar are made of at least one of the materials selected from the group consisting of metal, wood, and plastic material.